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Edmonton, Canada

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New S.U.B. by '66?



STUDENT PLANNERS working on the proposed new S.U.B. for the Edmonton campus will move into high gear over the summer in an effort to crystallize plans for final approval next Fall.

With negotiating now in process between the Students' Union planning commission and campus planning committee, Board of Governors, Provincial Government and Students' Council, chairman Iain Macdonald says he hopes to see as many as 100 students involved in the final decision-making phase of the project.

The incoming Students' Council, headed by newly-elected President second-year law student Francis Saville, is expected to press for a mid-October planning deadline.

Operating at the same time as the planning commission, it is expected, will be a six-student board of inquiry. The board will be modelled on royal commission lines, says Saville, if approved by new Council, and would be responsible for checking on the validity of planning involved in the project.

Mid-October approval of design plans would allow possible starting of construction of the proposed \$4 million new S.U.B. about March 1965. A fifteen-month building period would permit opening for a trial run during summer school 1966.

Preliminary plans for the building aroused considerable on-campus controversy during January and February, with 750 persons signing a petition demanding a general meeting of the student body on the subject of S.U.B. expansion.

Over 800 students attended the meeting. A motion that a referendum be held before the project go ahead was defeated, but conservative winds continued to blow strong as student elections approached.

Former secretary-treasurer Douglas McTavish, closely associated

with the project as student in charge of finances, was defeated in the presidential race when Saville campaigned promising careful investigation of the project and formation of the board of inquiry.

Planning for the summer will be aimed at resolving debate over several controversial aspects of the proposed building.

A recreation basement incorporating eight sheets of curling ice, ten lanes of bowling alleys, a dozen each billiards and table tennis tables will be examined more carefully to ensure its ability to pay its own way.

The area it is hoped, will pay all capital, debt and operating charges, while still charging rates below city commercial prices.

"We still don't know whether bowling should be five or ten-pin," adds Macdonald.

To be resolved also is the matter of a chapel.

"Three years ago," says D. E. J. Thompson, Principal of St. Stephen's College, "we didn't have an adequate chapel in sight. Now it seems suddenly we almost have more than we can handle."

The problem: while S.U.B. planners were debating inclusion of interfaith chapel facilities in the building, an alumni family was also planning a second chapel for donation to the campus.

Both sets of plans were presented to the Board of Governors in February, which recommended that an effort be made to see whether a single compromise chapel plan could be developed.

A new location for the proposed S.U.B. expansion is the site lying between the Administration and Armed Forces Buildings, fronting on 89th Avenue, where the University radio towers now stand.

UNIVERSITY HOPES TO BECOME NATIVE LINGUISTICS CENTRE

The University hopes to become a centre for the study of native languages of North America. The Canada Council has awarded the University \$1,750.00 toward realization of this goal.

The travel grant will be used to help bring experts in linguistics from Canada and the U.S. to a special conference in Edmonton sometime this summer.

They will plan a program of research in subjects such as the origin and structure of native languages, which could be undertaken by any centre set up at the University.

A FIRST ON THE PRAIRIES

A Master of Business Administration program to be offered by the Faculty of Commerce has been approved, beginning in the Fall. This will be the first such program established at a University in the prairie provinces.

The M.B.A. program which will normally require two academic years to complete, is designed to provide a comprehensive training and educational background for people with administrative responsibilities in both the public and private sectors of the economy. It will consist of ten courses and a thesis. Admission will be subject to the rules and regulations presently established by the Faculty of Graduate Studies.

Professor Charles Lee will be in charge of the M.B.A. program. Lecturers will be drawn from the present eighteen full-time teaching staff and the fourteen sessional appointees of the faculty. Within the past three months, thirty applications and enquiries have been received by the faculty for an M.B.A. program.

Dr. Hu Harries, Dean of the Commerce Faculty, comments that the advent of the M.B.A. completes the planned academic expansion of the faculty which began in 1959.

The Need for More Private Funds



HE UNIVERSITY will soon have to take a harder look at private sources of financial assistance to meet rising costs of higher education. "We can use all the money that can be poured into the University," says President Dr. Walter Johns, "and we can use it to good advantage."

The University this year will receive approximately 61 per cent of its revenue from the provincial government, 14 per cent from the federal government and 23 per cent from student fees.

Thus, only two per cent comes from other sources. The Canadian average, based on reports from 42 Universities and colleges, was seven times that amount two years ago.

Other institutions which have built up traditions of private support, es-

pecially eastern Universities, get these contributions mainly from alumni and from individuals and corporations.

The other three western Universities are similar to the U. of A. in that they are mainly government-sponsored, but each has had a major fund-raising program.

Dr. Johns said the University must look to private sources for development in special areas which would be of great value to the University. He pointed out that over the past three years the increase in the number of doctorates obtained in the areas of the humanities and social sciences has been almost nil. And this is the field from which Universities draw most of their instructors—already in short supply.

He said additional support is necessary, for example, for the Boreal Institute which requires funds for research projects in the western Arctic beyond those available from the usual sources.

Dr. H. S. Armstrong, U. of A. vice-president, says that when people become directly involved in giving financial support to their University—apart from tax funds—their interest in the University increases.

"Interest in, and understanding of, the role of a University are very important."

He suggested that a reason for the lack of private support here is that the University is so heavily supported by taxes people may think anything they owe is already paid.

CROWN LAND FOR RESEARCH

The Department of Entomology at the University of Alberta has secured approval from the Board of Governors to lease one full section of crown land at George Lake, 40 miles northwest of Edmonton.

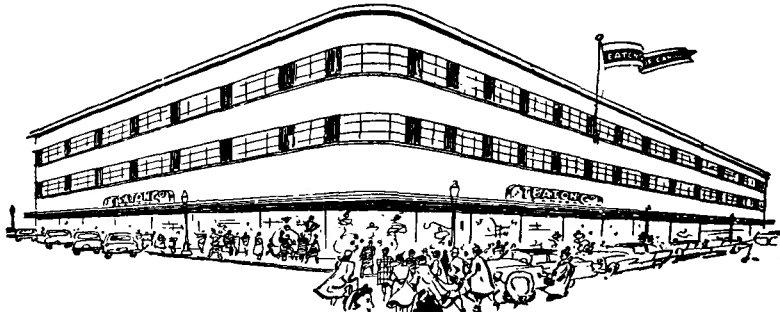
Dr. Brian Hocking, Head of the Department, comments that the land will be used by the teaching staff and graduate students for observation and experimentation on the effects of the long term environmental changes on insect life. He hopes that the department will be able to secure another site shortly where insecticides are being used, and compare the environmental effects of the two areas.

The George Lake site is the nearest section of virgin land to the University which could be used for this scientific research.

DIRECTOR OF FOOD SERVICES

Mr. Joel Stoneham has been appointed Director of University Food Services.

Mr. Stoneham received his B.H.E. and master's degree in human nutrition at the University of New Hampshire. He has served as a food administrator at the University of Michigan and in the United States Navy, and is presently employed as assistant director of Food Services at Kent State University.



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FIRST GRADUATE COURSE IN I.V.E.



THE DEPARTMENT of industrial and vocational education at the University is ready for its first graduate students this summer. Nineteen students have registered so far to take their master's degrees in industrial arts and vocational education.

"We can take as many as 40—20 in each program," says Dr. Henry Ziel, head of the department of industrial and vocational education.

The department—less than two years old—is the only one in Canada offering degrees in these fields and will be the only one offering a graduate program.

"There is an abundance of research material for the graduate to work on," says Dr. Ziel. "For one thing, there is the problem of how to introduce a student who has never been exposed to much technology into a program of quite complicated technical-vocational training."

This sort of problem often arises in the retraining of displaced workers. Other research which Dr. Ziel would like to see done involves investigation into the best methods of teaching technology to students.

The master's program in both industrial arts and vocational education involves a winter term, a summer session and a research thesis.

In addition to its 82 undergraduate students, the department is training 15 degree teachers in vocational guidance.

FACULTY CLUB MANAGER APPOINTED

Mr. Charles Medley has been appointed manager of the University Faculty Club. He will be in charge of the operations of the new building which is at present under construction on Saskatchewan Drive, east of 116th Street. It is expected to be completed by September 1st.

At present, Mr. Medley is manager of the Uplands Golf and Country Club in Victoria, B.C.



GOLDEN GRADUATES AT HOMECOMING

After a span of fifty years a moment of warm reminiscence was relished at Homecoming by H. J. Dean, B.A. '14, Edmonton, left; Mrs. Dean; Rev. D. H. Telfer, B.A. '14, Vancouver; Mrs. Telfer.

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The Money Behind Our Colleges

ARE AMERICA'S colleges and universities in good financial health—or bad?

Are they pricing themselves out of many students' reach? Or can—and should—students and their parents carry a greater share of the cost of higher education?

Can state and local governments appropriate more money for higher education? Or is there a danger that taxpayers may “revolt”?

Does the federal government—now the third-largest provider of funds to higher education—pose a threat to the freedom of our colleges and universities? Or is the “threat” groundless, and should higher education seek even greater federal support?

Can private donors—business corporations, religious denominations, foundations, alumni, and alumnae—increase their gifts to colleges and universities as greatly as some authorities say is necessary? Or has private philanthropy gone about as far as it can go?

There is no set of “right” answers to such questions. College and university financing is complicated, confusing, and often controversial, and even the administrators of the nation's institutions of higher learning are not of one mind as to what the best answers are.

One thing is certain: financing higher education is not a subject for “insiders,” alone. Everybody has a stake in it.



Where U.S. colleges and universities get their income

THESE DAYS, most of America's colleges and universities manage to make ends meet. Some do not: occasionally, a college shuts its doors, or changes its character, because in the jungle of educational financing it has lost the fiscal fitness to survive. Certain others, qualified observers suspect, hang onto life precariously, sometimes sacrificing educational quality to conserve their meager resources. But most U.S. colleges and universities survive, and many do so with some distinction. On the surface, at least, they appear to be enjoying their best financial health in history.

The voice of the bulldozer is heard in our land, as new buildings go up at a record rate. Faculty salaries in most institutions—at critically low levels not long ago—are, if still a long distance from the high-tax brackets, substantially better than they used to be. Appropriations of state funds for higher education are at an all-time high. The federal government is pouring money into the campuses at an unprecedented rate. Private gifts and grants were never more numerous. More students than ever before, paying higher fees than ever before, crowd the classrooms.

How real is this apparent prosperity? Are there danger signals? One purpose of this report is to help readers find out.

HOW DO colleges and universities get the money they run on? By employing a variety of financing processes and philosophies. By conducting, says one participant, the world's busiest patchwork quilting-bee.

U.S. higher education's balance sheets—the latest of which shows the country's colleges and universities receiving more than \$7.3 billion in current-fund income—have been known to baffle even those men and women who are at home in the depths of a corporate financial statement. Perusing them, one learns that even the basic terms have lost their old, familiar meanings.

“Private” institutions of higher education, for example, receive enormous sums of “public” money—including more federal research funds than go to all so-called “public” colleges and universities.

And “public” institutions of higher education own some of the largest “private” endowments. (The endowment of the University of Texas, for instance, has a higher book value than Yale's.)

When the English language fails him so completely, can higher education's balance-sheet reader be blamed for his bafflement?

IN A RECENT year, U.S. colleges and universities got their current-fund income in this fashion:

20.7% came from student tuition and fees.

18.9% came from the federal government.

22.9% came from state governments.

2.6% came from local governments.

6.4% came from private gifts and grants.

9.4% was other educational and general income, including income from endowments.

17.5% came from auxiliary enterprises, such as dormitories, cafeterias, and dining halls.

1.6% was student-aid income.

Such a breakdown, of course, does not match the income picture at any actual college or university. It includes institutions of many shapes, sizes, and financial policies. Some heat their classrooms and pay their professors largely with money collected from students. Others receive relatively little from this source. Some balance their budgets with large sums from governments. Others not only receive no such funds, but may actively spurn them. Some draw substantial interest from their endowments and receive gifts and grants from a variety of sources.

"There is something very reassuring about this assorted group of patrons of higher education," writes a college president. "They are all acknowledging the benefits they derive from a strong system of colleges and universities. Churches that get clergy, communities that get better citizens, businesses that get better employees—all share in the costs of the productive machinery, along with the student . . ."

In the campus-to-campus variations there is often a deep significance; an institution's method of financing may tell as much about its philosophies as do the most eloquent passages in its catalogue. In this sense, one should understand that *whether* a college or university receives enough income to survive is only part of the story. *How* and *where* it gets its money may have an equally profound effect upon its destiny.



PRIVATE INSTITUTIONS:
34.3% of their income
comes from student fees.

from Students 20.7 per cent

LAST FALL, some 4.4 million young Americans were enrolled in the nation's colleges and universities—2.7 million in public institutions, 1.7 million in private.

For most of them, the enrollment process included a stop at a cashier's office, to pay tuition and other educational fees.

How much they paid varied considerably from one campus to another. For those attending public institutions, according to a U.S. government survey, the median in 1962-63 was \$170 per year. For those attending private institutions, the median was \$690—four times as high.

There were such differences as these:

In public universities, the median charge was \$268.

In public liberal arts colleges, it was \$168.

In public teachers colleges, it was \$208.

In public junior colleges, it was \$113.

Such educational fees, which do not include charges for meals or dormi-



PUBLIC INSTITUTIONS:
10% of their income
comes from student fees.

TUITION continued

Are tuition charges becoming too burdensome?



tory rooms, brought the nation's public institutions of higher education a total of \$415 million—one-tenth of their entire current-fund income.

By comparison:

In private universities, the median charge was \$1,038.

In private liberal arts colleges, it was \$751.

In private teachers colleges, it was \$575.

In private junior colleges, it was \$502.

In 1961-62, such student payments brought the private colleges and universities a total of \$1.1 billion—more than *one-third* of their entire current-fund income.

From all students, in all types of institution, America's colleges and universities thus collected a total of \$1.5 billion in tuition and other educational fees.

NO NATION puts more stock in maximum college attendance by its youth than does the United States," says an American report to an international committee. "Yet no nation expects those receiving higher education to pay a greater share of its cost."

The leaders of both private and public colleges and universities are worried by this paradox.

Private-institution leaders are worried because they have no desire to see their campuses closed to all but the sons and daughters of well-to-do families. But, in effect, this is what may happen if students must continue to be charged more than a third of the costs of providing higher education—costs that seem to be eternally on the rise. (Since one-third is the average for *all* private colleges and universities, the students' share of costs is lower in some private colleges and universities, considerably higher in others.)

Public-institution leaders are worried because, in the rise of tuition and other student fees, they see the eventual collapse of a cherished American dream: equal educational opportunity for all. Making students pay a greater part of the cost of public higher education is no mere theoretical threat; it is already taking place, on a broad scale. Last year, half of the state universities and land-grant institutions surveyed by the federal government reported that, in the previous 12 months, they had had to increase the tuition and fees charged to home-state students. More than half had raised their charges to students who came from other states.

CAN THE RISE in tuition rates be stopped—at either public or private colleges and universities?

A few vocal critics think it should not be; that tuition should, in fact, go up. Large numbers of students can afford considerably more than they are now paying, the critics say.

"Just look at the student parking lots. You and I are helping to pay for those kids' cars with our taxes," one campus visitor said last fall.

Asked an editorial in a Tulsa newspaper:

"Why should taxpayers, most of whom have not had the advantage of college education, continue to subsidize students in state-supported universities who have enrolled, generally, for the frank purpose of eventually earning more than the average citizen?"

An editor in Omaha had similar questions:

"Why shouldn't tuition cover more of the rising costs? And why shouldn't young people be willing to pay higher tuition fees, and if necessary borrow the money against their expected earnings? And why shouldn't tuition charges have a direct relationship to the prospective earning power—less in the case of the poorer-paid professions and more in the case of those which are most remunerative?"

Such questions, or arguments-in-the-form-of-questions, miss the main point of tax-supported higher education, its supporters say.

"The primary beneficiary of higher education is society," says a joint statement of the State Universities Association and the Association of State Universities and Land-Grant Colleges.

"The process of making students pay an increasing proportion of the costs of higher education will, if continued, be disastrous to American society and to American national strength.

"It is based on the theory that higher education benefits only the individual and that he should therefore pay immediately and directly for its cost—through borrowing if necessary. . . .

"This is a false theory. . . . It is true that great economic and other benefits do accrue to the individual, and it is the responsibility of the individual to help pay for the education of others on this account—through taxation and through voluntary support of colleges and universities, in accordance with the benefits received. But even from the narrowest of economic standpoints, a general responsibility rests on society to finance higher education. The businessman who has things to sell is a beneficiary, whether he attends college or not, whether his children do or not"

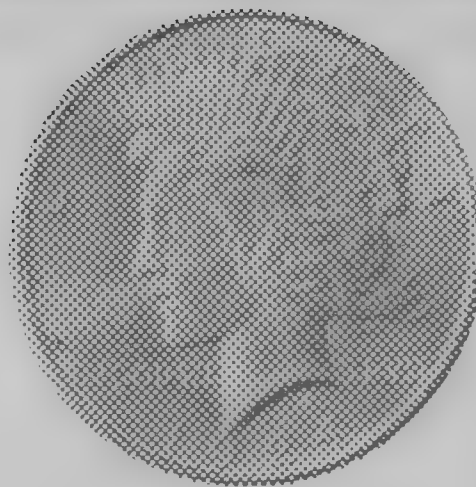
Says a university president: "I am worried, as are most educators, about the possibility that we will price ourselves out of the market."

For private colleges—already forced to charge for a large part of the cost of providing higher education—the problem is particularly acute. As costs continue to rise, where will private colleges get the income to meet them, if not from tuition?

After studying 100 projections of their budgets by private liberal arts colleges, Sidney G. Tickton, of the Fund for the Advancement of Education, flatly predicted:

"Tuition will be much higher ten years hence."

Already, Mr. Tickton pointed out, tuition at many private colleges is beyond the reach of large numbers of students, and scholarship aid isn't large enough to help. "Private colleges are beginning to realize that they haven't been taking many impecunious students in recent years. The figures show that they can be expected to take an even smaller proportion in the future."



**Or should students
carry a heavier
share of the costs?**

CONTINUED

TUITION continued



PRIVATE INSTITUTIONS:
1.4% of their income
comes from the states.

22.9 per cent from States



PUBLIC INSTITUTIONS:
22.9% of their income
comes from the states.

"The facts are indisputable. Private colleges may not like to admit this or think of themselves as educators of only the well-heeled, but the signs are that they aren't likely to be able to do very much about it in the decade ahead."

What is the outlook at public institutions? Members of the Association of State Colleges and Universities were recently asked to make some predictions on this point. The consensus:

They expect the tuition and fees charged to their home-state students to rise from a median of \$200 in 1962-63 to \$230, five years later. In the previous five years, the median tuition had increased from \$150 to \$200. Thus the rising-tuition trend would not be stopped, they felt—but it would be slowed.

THE ONLY alternative to higher tuition, whether at public or private institutions, is increased income from other sources—taxes, gifts, grants. If costs continue to increase, such income will have to increase not merely in proportion, but at a faster rate—if student charges are to be held at their present levels.

What are the prospects for these other sources of income? See the pages that follow.

COLLEGES and universities depend upon many sources for their financial support. But one source towers high above all the rest: the American taxpayer.

The taxpayer provides funds for higher education through all levels of government—federal, state, and local.

Together, in the most recent year reported, governments supplied 44.4 per cent of the current-fund income of all U.S. colleges and universities—a grand total of \$3.2 billion.

This was more than twice as much as all college and university students paid in tuition fees. It was nearly seven times the total of all private gifts and grants.

By far the largest sums for educational purposes came from state and local governments: \$1.9 billion, altogether. (Although the federal government's over-all expenditures on college and university campuses were large—nearly \$1.4 billion—all but \$262 million was earmarked for research.)

STATES HAVE HAD a financial interest in higher education since the nation's founding. (Even before independence, Harvard and other colonial colleges had received government support.) The first state university, the University of Georgia, was chartered in 1785. As settlers

moved west, each new state received two townships of land from the federal government, to support an institution of higher education.

But the true flourishing of publicly supported higher education came after the Civil War. State universities grew. Land-grant colleges were founded, fostered by the Morrill Act of 1862. Much later, local governments entered the picture on a large scale, particularly in the junior-college field.

Today, the U.S. system of publicly supported colleges and universities is, however one measures it, the world's greatest. It comprises 743 institutions (345 local, 386 state, 12 federal), compared with a total of 1,357 institutions that are privately controlled.

Enrollments in the public colleges and universities are awesome, and certain to become more so.

As recently as 1950, half of all college and university students attended private institutions. No longer—and probably never again. Last fall, the public colleges and universities enrolled 60 per cent—one million more students than did the private institutions. And, as more and more young Americans go to college in the years ahead, both the number and the proportion attending publicly controlled institutions will soar.

By 1970, according to one expert projection, there will be 7 million college and university students. Public institutions will enroll 67 per cent of them.

By 1980, there will be 10 million students. Public institutions will enroll 75 per cent of them.

THE FINANCIAL implications of such enrollments are enormous. Will state and local governments be able to cope with them?

In the latest year for which figures have been tabulated, the current-fund income of the nation's public colleges and universities was \$4.1 billion. Of this total, state and local governments supplied more than \$1.8 billion, or 44 per cent. To this must be added \$790 million in capital outlays for higher education, including \$613 million for new construction.

In the fast-moving world of public-college and university financing, such heady figures are already obsolete. At present, reports the Committee for Economic Development, expenditures for higher education are the fastest-growing item of state and local-government financing. Between 1962 and 1968, while expenditures for all state and local-government activities will increase by about 50 per cent, expenditures for higher education will increase 120 per cent. In 1962, such expenditures represented 9.5 per cent of state and local tax income; in 1968, they will take 12.3 per cent.

Professor M.M. Chambers, of the University of Michigan, has totted up each state's tax-fund appropriations to colleges and universities (see list, next page). He cautions readers not to leap to interstate comparisons; there are too many differences between the practices of the 50 states to make such an exercise valid. But the differences do not obscure



**Will state taxes
be sufficient to meet
the rocketing demand?**

CONTINUED

STATE FUNDS continued

State Tax Funds For Higher Education

	Fiscal 1963	Change from 1961	
Alabama.....	\$22,051,000	-\$346,000	- 1.5%
Alaska.....	3,301,000	+ 978,000	+42%
Arizona.....	20,422,000	+ 4,604,000	+29%
Arkansas.....	16,599,000	+ 3,048,000	+22.5%
California....	243,808,000	+48,496,000	+25%
Colorado.....	29,916,000	+ 6,634,000	+28.25%
Connecticut...	15,948,000	+ 2,868,000	+22%
Delaware.....	5,094,000	+ 1,360,000	+36.5%
Florida.....	46,043,000	+ 8,780,000	+23.5%
Georgia.....	32,162,000	+ 4,479,000	+21%
Hawaii.....	10,778,000	+ 3,404,000	+46%
Idaho.....	10,137,000	+ 1,337,000	+15.25%
Illinois.....	113,043,000	+24,903,000	+28.25%
Indiana.....	62,709,000	+12,546,000	+25%
Iowa.....	38,914,000	+ 4,684,000	+13.5%
Kansas.....	35,038,000	+ 7,099,000	+25.5%
Kentucky.....	29,573,000	+ 9,901,000	+50.25%
Louisiana....	46,760,000	+ 2,203,000	+ 5%
Maine.....	7,429,000	+ 1,830,000	+32.5%
Maryland.....	29,809,000	+ 3,721,000	+20.5%
Massachusetts.	16,503,000	+ 3,142,000	+23.5%
Michigan.....	104,082,000	+ 6,066,000	+ 6%
Minnesota....	44,058,000	+ 5,808,000	+15.25%
Mississippi...	17,500,000	+ 1,311,000	+ 8%
Missouri.....	33,253,000	+ 7,612,000	+29.5%

continued opposite

the fact that, between fiscal year 1961 and fiscal 1963, all states except Alabama and Montana increased their tax-fund appropriations to higher education. The average was a whopping 24.5 per cent.

Can states continue to increase appropriations? No one answer will serve from coast to coast.

Poor states will have a particularly difficult problem. The Southern Regional Education Board, in a recent report, told why:

"Generally, the states which have the greatest potential demand for higher education are the states which have the fewest resources to meet the demand. Rural states like Alabama, Arkansas, Mississippi, and South Carolina have large numbers of college-age young people and relatively small per-capita income levels." Such states, the report concluded, can achieve educational excellence only if they use a larger proportion of their resources than does the nation as a whole.

A leading Western educator summed up his state's problem as follows:

"Our largest age groups, right now, are old people and youngsters approaching college age. Both groups depend heavily upon the producing, taxpaying members of our economy. The elderly demand state-financed welfare; the young demand state-financed education.

"At present, however, the producing part of our economy is composed largely of 'depression babies'—a comparatively small group. For the next few years, their per-capita tax burden will be pretty heavy, and it may be hard to get them to accept any big increases."

But the alternatives to more tax money for public colleges and universities—higher tuition rates, the turning away of good students—may be even less acceptable to many taxpayers. Such is the hope of those who believe in low-cost, public higher education.

EVERY projection of future needs shows that state and local governments must increase their appropriations vastly, if the people's demands for higher education are to be met. The capacity of a government to make such increases, as a California study has pointed out, depends on three basic elements:

- 1) The size of the "stream of income" from which the support for higher education must be drawn;
- 2) The efficiency and effectiveness of the tax system; and
- 3) The will of the people to devote enough money to the purpose.

Of these elements, the third is the hardest to analyze, in economic terms. It may well be the most crucial.

Here is why:

In their need for increased state and local funds, colleges and universities will be in competition with growing needs for highways, urban renewal, and all the other services that citizens demand of their governments. How the available tax funds will be allocated will depend, in large measure, on how the people *rank* their demands, and how insistently they make the demands known.

"No one should know better than our alumni the importance of having society invest its money and faith in the education of its young people," Allan W. Ostar, director of the Office of Institutional Research, said recently. "Yet all too often we find alumni of state universities who are not willing to provide the same opportunity to future generations that they enjoyed. Our alumni should be leading the fight for adequate tax support of our public colleges and universities.

"If they don't, who will?"

TO SOME Americans, the growth of state-supported higher education, compared with that of the private colleges and universities, has been disturbing for other reasons than its effects upon the tax rate.

One cause of their concern is a fear that government dollars inevitably will be accompanied by a dangerous sort of government control. The fabric of higher education, they point out, is laced with controversy, new ideas, and challenges to all forms of the status quo. Faculty members, to be effective teachers and researchers, must be free of reprisal or fears of reprisal. Students must be encouraged to experiment, to question, to disagree.

The best safeguard, say those who have studied the question, is legal autonomy for state-supported higher education: independent boards of regents or trustees, positive protections against interference by state agencies, post-audits of accounts but no line-by-line political control over budget proposals—the latter being a device by which a legislature might be able to cut the salary of an "offensive" professor or stifle another's research. Several state constitutions already guarantee such autonomy to state universities. But in some other states, college and university administrators must be as adept at politicking as at educating, if their institutions are to thrive.

Another concern has been voiced by many citizens. What will be the effects upon the country's private colleges, they ask, if the public-higher-education establishment continues to expand at its present rate? With state-financed institutions handling more and more students—and, generally, charging far lower tuition fees than the private institutions can afford—how can the small private colleges hope to survive?

President Robert D. Calkins, of the Brookings Institution, has said:

"Thus far, no promising alternative to an increased reliance on public institutions and public support has appeared as a means of dealing with the expanding demand for education. The trend may be checked, but there is nothing in sight to reverse it. . . .

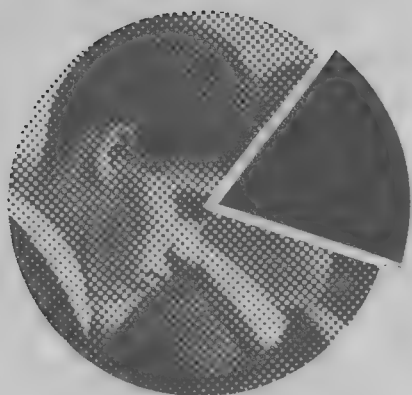
"Many weak private institutions may have to face a choice between insolvency, mediocrity, or qualifying as public institutions. But enlarged opportunities for many private and public institutions will exist, often through cooperation. . . . By pooling resources, all may be strengthened. . . . In view of the recent support the liberal arts colleges have elicited, the more enterprising ones, at least, have an undisputed role for future service."



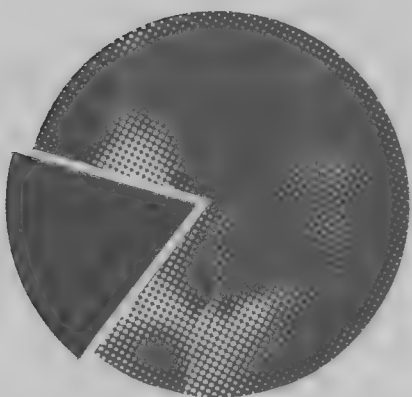
	Fiscal 1963	Change from 1961	
Montana	\$11,161,000	—\$ 70,000	— 0.5%
Nebraska . . .	17,078,000	+ 1,860,000	+12.25%
Nevada	5,299,000	+ 1,192,000	+29%
New Hampshire	4,733,000	+ 627,000	+15.25%
New Jersey . .	34,079,000	+ 9,652,000	+39.5%
New Mexico . .	14,372,000	+ 3,133,000	+28%
New York . . .	156,556,000	+67,051,000	+75%
North Carolina	36,532,000	+ 6,192,000	+20.5%
North Dakota .	10,386,000	+ 1,133,000	+12.25%
Ohio	55,620,000	+10,294,000	+22.5%
Oklahoma . . .	30,020,000	+ 3,000,000	+11%
Oregon	33,423,000	+ 4,704,000	+16.25%
Pennsylvania .	56,187,000	+12,715,000	+29.5%
Rhode Island .	7,697,000	+ 2,426,000	+46%
South Carolina	15,440,000	+ 2,299,000	+17.5%
South Dakota .	8,702,000	+ 574,000	+ 7%
Tennessee . . .	22,359,000	+ 5,336,000	+31.25%
Texas	83,282,000	+16,327,000	+24.5%
Utah	15,580,000	+ 2,441,000	+18.5%
Vermont	3,750,000	+ 351,000	+10.25%
Virginia	28,859,000	+ 5,672,000	+24.5%
Washington . .	51,757,000	+ 9,749,000	+23.25%
West Virginia .	20,743,000	+ 3,824,000	+22.5%
Wisconsin . . .	44,670,000	+ 7,253,000	+19.5%
Wyoming	5,599,000	+ 864,000	+18.25%
TOTALS . . .	\$1,808,825,000	+\$357,499,000	
WEIGHTED AVERAGE			+24.5%

CONTINUED

18.9 per cent from Washington



PRIVATE INSTITUTIONS:
19.1% of their income
comes from Washington.



PUBLIC INSTITUTIONS:
18.6% of their income
comes from Washington.

I SEEM TO SPEND half my life on the jets between here and Washington," said an official of a private university on the West Coast, not long ago.

"We've decided to man a Washington office, full time," said the spokesman for a state university, a few miles away.

For one in 20 U.S. institutions of higher education, the federal government in recent years has become one of the biggest facts of financial life. For some it is *the* biggest. "The not-so-jolly long-green giant," one man calls it.

Washington is no newcomer to the campus scene. The difference, today, is one of scale. Currently the federal government spends between \$1 billion and \$2 billion a year at colleges and universities. So vast are the expenditures, and so diverse are the government channels through which they flow to the campuses, that a precise figure is impossible to come by. The U.S. Office of Education's latest estimate, covering fiscal 1962, is that Washington was the source of \$1.389 billion—or nearly 19 per cent—of higher education's total current-fund income.

"It may readily be seen," said Congresswoman Edith Green of Oregon, in a report last year to the House Committee on Education and Labor, "that the question is not *whether* there shall be federal aid to education."

Federal aid exists. It is big and is growing.

THE word *aid*, however, is misleading. Most of the federal government's expenditures in higher education—more than four and a half times as much as for all other purposes combined—are for research that the government needs. Thus, in a sense, the government is the purchaser of a commodity; the universities, like any other producer with whom the government does business, supply that commodity. The relationship is one of *quid pro quo*.

Congresswoman Green is quick to acknowledge this fact:

"What has not been . . . clear is the dependency of the federal government on the educational system. The government relies upon the universities to do those things which cannot be done by government personnel in government facilities.

"It turns to the universities to conduct basic research in the fields of agriculture, defense, medicine, public health, and the conquest of space, and even for managing and staffing of many governmental research laboratories.

"It relies on university faculty to judge the merits of proposed research.

"It turns to them for the management and direction of its foreign aid programs in underdeveloped areas of the world.

"It relies on them for training, in every conceivable field, of government personnel—both military and civilian."

THE FULL RANGE of federal-government relationships with U.S. higher education can only be suggested in the scope of this report. Here are some examples:

Land-grant colleges had their origins in the Morrill Land Grant College Act of 1862, when the federal government granted public lands to the states for the support of colleges "to teach such branches of learning as are related to agriculture and the mechanic arts," but not excluding science and classics. Today there are 68 such institutions. In fiscal 1962, the federal government distributed \$10.7 million in land-grant funds.

The armed forces operate officers training programs in the colleges and universities—their largest source of junior officers.

Student loans, under the National Defense Education Act, are the major form of federal assistance to undergraduate students. They are administered by 1,534 participating colleges and universities, which select recipients on the basis of need and collect the loan repayments. In fiscal 1962, more than 170,000 undergraduates and nearly 15,000 graduate students borrowed \$90 million in this way.

"The success of the federal loan program," says the president of a college for women, "is one of the most significant indexes of the important place the government has in financing private as well as public educational institutions. The women's colleges, by the way, used to scoff at the loan program. 'Who would marry a girl with a debt?' people asked. 'A girl's dowry shouldn't be a mortgage,' they said. But now more than 25 per cent of our girls have government loans, and they don't seem at all perturbed."

Fellowship grants to graduate students, mostly for advanced work in science or engineering, supported more than 35,000 persons in fiscal 1962. Cost to the government: nearly \$104 million. In addition, around 20,000 graduate students served as paid assistants on government-sponsored university research projects.

Dormitory loans through the college housing program of the Housing and Home Finance Agency have played a major role in enabling colleges and universities to build enough dormitories, dining halls, student unions, and health facilities for their burgeoning enrollments. Between 1951 and 1961, loans totaling more than \$1.5 billion were approved. Informed observers believe this program finances from 35 to 45 per cent of the total current construction of such facilities.

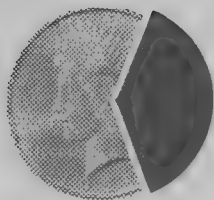
Grants for research facilities and equipment totaled \$98.5 million in fiscal 1962, the great bulk of which went to universities conducting scientific research. The National Science Foundation, the National Institutes of Health, the National Aeronautics and Space Administration, and the Atomic Energy Commission are the principal sources of such grants. A Department of Defense program enables institutions to build facilities and write off the cost.

To help finance new classrooms, libraries, and laboratories, Congress last year passed a \$1.195 billion college aid program and, said President

Can federal dollars properly be called federal "aid"?

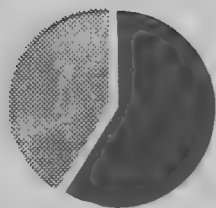


FEDERAL FUNDS continued



38%
of Federal research funds
go to these 10 institutions:

U. of California	U. of Illinois
Mass. Inst. of Technology	Stanford U.
Columbia U.	U. of Chicago
U. of Michigan	U. of Minnesota
Harvard U.	Cornell U.



59%
of Federal research funds
go to the above 10 + these 15:

U. of Wisconsin	Yale U.
U. of Pennsylvania	Princeton U.
New York U.	Iowa State U.
Ohio State U.	Cal. Inst. of Technology
U. of Washington	U. of Pittsburgh
Johns Hopkins U.	Northwestern U.
U. of Texas	Brown U.
	U. of Maryland

Johnson, thus was "on its way to doing more for education than any since the land-grant college bill was passed 100 years ago."

Support for medical education through loans to students and funds for construction was authorized by Congress last fall, when it passed a \$236 million program.

To strengthen the curriculum in various ways, federal agencies spent approximately \$9.2 million in fiscal 1962. Samples: A \$2 million National Science Foundation program to improve the content of science courses; a \$2 million Office of Education program to help colleges and universities develop, on a matching-fund basis, language and area-study centers; a \$2 million Public Health Service program to expand, create, and improve graduate work in public health.

Support for international programs involving U.S. colleges and universities came from several federal sources. Examples: Funds spent by the Peace Corps for training and research totaled more than \$7 million. The Agency for International Development employed some 70 institutions to administer its projects overseas, at a cost of about \$26 million. The State Department paid nearly \$6 million to support more than 2,500 foreign students on U.S. campuses, and an additional \$1.5 million to support more than 700 foreign professors.

BUT the greatest federal influence, on many U.S. campuses, comes through the government's expenditures for research.

As one would expect, most of such expenditures are made at universities, rather than at colleges (which, with some exceptions, conduct little research).

In the 1963 Godkin Lectures at Harvard, the University of California's President Clark Kerr called the federal government's support of research, starting in World War II, one of the "two great impacts [which], beyond all other forces, have molded the modern American university system and made it distinctive." (The other great impact: the land-grant college movement.)

At the institutions where they are concentrated, federal research funds have had marked effects. A self-study by Harvard, for example, revealed that *90 per cent* of the research expenditures in the university's physics department were paid for by the federal government; *67 per cent* in the chemistry department; and *95 per cent* in the division of engineering and applied physics.

IS THIS government-dollar dominance in many universities' research budgets a healthy development?

After analyzing the role of the federal government on their campuses, a group of universities reporting to the Carnegie Foundation for the Advancement of Teaching agreed that "the effects [of government expenditures for campus-based research projects] have, on balance, been salutary."

Said the report of one institution:

"The opportunity to make expenditures of this size has permitted a

research effort far superior to anything that could have been done without recourse to government sponsors. . . .

"Any university that declined to participate in the growth of sponsored research would have had to pay a high price in terms of the quality of its faculty in the science and engineering areas. . . ."

However, the university-government relationship is not without its irritations.

One of the most irksome, say many institutions, is the government's failure to reimburse them fully for the "indirect costs" they incur in connection with federally sponsored research—costs of administration, of libraries, of operating and maintaining their physical plant. If the government fails to cover such costs, the universities must—often by drawing upon funds that might otherwise be spent in strengthening areas that are not favored with large amounts of federal support, *e.g.*, the humanities.

Some see another problem: faculty members may be attracted to certain research areas simply because federal money is plentiful there. "This . . . may tend to channel their efforts away from other important research and . . . from their teaching and public-service responsibilities," one university study said.

The government's emphasis upon science, health, and engineering, some persons believe, is another drawback to the federal research expenditures. "Between departments, a form of imbalance may result," said a recent critique. "The science departments and their research may grow and prosper. The departments of the humanities and social sciences may continue, at best, to maintain their *status quo*."

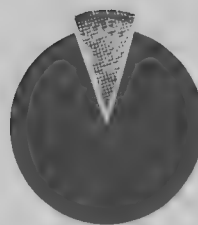
"There needs to be a National Science Foundation for the humanities," says the chief academic officer of a Southern university which gets approximately 20 per cent of its annual budget from federal grants.

"Certainly government research programs create imbalances within departments and between departments," said the spokesman for a leading Catholic institution, "but so do many other influences at work within a university. . . . Imbalances must be lived with and made the most of, if a level of uniform mediocrity is not to prevail."

THE CONCENTRATION of federal funds in a few institutions—usually the institutions which already are financially and educationally strong—makes sense from the standpoint of the *quid pro quo* philosophy that motivates the expenditure of most government funds. The strong research-oriented universities, obviously, can deliver the commodity the government wants.

But, consequently, as a recent Carnegie report noted, "federal support is, for many colleges and universities, not yet a decisive or even a highly influential fact of academic life."

Why, some persons ask, should not the government conduct equally well-financed programs in order to improve those colleges and universities which are *not* strong—and thus raise the quality of U.S. higher education as a whole?



90%

**of Federal research funds
go to the 25 opposite + these 75:**

Pennsylvania State U.	Wayne State U.
Duke U.	Baylor U.
U. of Southern Cal.	U. of Denver
Indiana U.	U. of Missouri
U. of Rochester	U. of Georgia
Washington U.	U. of Arkansas
U. of Colorado	U. of Nebraska
Purdue U.	Tufts U.
George Washington U.	U. of Alabama
Western Reserve U.	New Mexico State U.
Florida State U.	Washington State U.
Yeshiva U.	Boston U.
U. of Florida	U. of Buffalo
U. of Oregon	U. of Kentucky
U. of Utah	U. of Cincinnati
Tulane U.	Stevens Inst. of Technology
U. of N. Carolina	Oklahoma State U.
Michigan State U.	Georgetown U.
Polytechnic Inst. of Brooklyn	Medical Col. of Virginia
U. of Miami	Mississippi State U.
U. of Tennessee	Colorado State U.
U. of Iowa	Auburn U.
Texas A. & M. Col.	Dartmouth Col.
Rensselaer Polytechnic Inst.	Emory U.
U. of Kansas	U. of Vermont
U. of Arizona	Brandeis U.
Vanderbilt U.	Marquette U.
Syracuse U.	Jefferson Medical Col.
Oregon State U.	Va. Polytechnic Inst.
Ga. Inst. of Technology	U. of Louisville
U. of Virginia	Kansas State U.
Rutgers U.	St. Louis U.
Louisiana State U.	West Virginia U.
Carnegie Inst. of Technology	U. of Hawaii
U. of Oklahoma	U. of Mississippi
N. Carolina State U.	Notre Dame U.
Illinois Inst. of Technology	U. of New Mexico
	Temple U.

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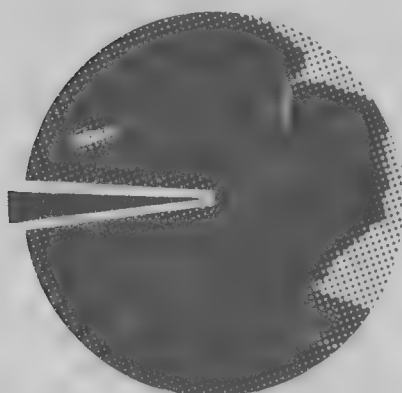
FEDERAL FUNDS continued

This question is certain to be warmly debated in years to come. Coupled with philosophical support or opposition will be this pressing practical question: can private money, together with state and local government funds, solve higher education's financial problems, without resort to Washington? Next fall, when the great, long-predicted "tidal wave" of students at last reaches the nation's campuses, the time of testing will begin.

6.4 per cent from Gifts and Grants



PRIVATE INSTITUTIONS:
11.6% of their income
comes from gifts and grants.



PUBLIC INSTITUTIONS:
2.3% of their income
comes from gifts and grants.

AS A SOURCE of income for U.S. higher education, private gifts and grants are a comparatively small slice on the pie charts: 11.6% for the private colleges and universities, only 2.3% for public.

But, to both types of institution, private gifts and grants have an importance far greater than these percentages suggest.

"For us," says a representative of a public university in the Midwest, "private funds mean the difference between the adequate and the excellent. The university needs private funds to serve purposes for which state funds cannot be used: scholarships, fellowships, student loans, the purchase of rare books and art objects, research seed grants, experimental programs."

"Because the state provides basic needs," says another public-university man, "every gift dollar can be used to provide for a margin of excellence."

Says the spokesman for a private liberal arts college: "We must seek gifts and grants as we have never sought them before. They are our one hope of keeping educational quality up, tuition rates down, and the student body democratic. I'll even go so far as to say they are our main hope of keeping the college, as we know it, alive."

FROM 1954-55 through 1960-61, the independent Council for Financial Aid to Education has made a biennial survey of the country's colleges and universities, to learn how much private aid they received. In four surveys, the institutions answering the council's questionnaires reported they had received more than \$2.4 billion in voluntary gifts.

Major private universities received \$1,046 million.

Private coeducational colleges received \$628 million.

State universities received nearly \$320 million.

Professional schools received \$171 million.

Private women's colleges received \$126 million.

Private men's colleges received \$117 million.

Junior colleges received \$31 million.

Municipal universities received nearly \$16 million.

Over the years covered by the CFAE's surveys, these increases took place:

Gifts to the private universities went up 95.6%.

Gifts to private coed colleges went up 82%.

Gifts to state universities went up 184%.

Gifts to professional schools went up 134%.

Where did the money come from? Gifts and grants reported to the council came from these sources:

General welfare foundations gave \$653 million.

Non-alumni donors gave \$539.7 million.

Alumni and alumnae gave \$496 million.

Business corporations gave \$345.8 million.

Religious denominations gave \$216 million.

Non-alumni, non-church groups gave \$139 million.

Other sources gave \$66.6 million.

All seven sources increased their contributions over the period.

BUT THE RECORDS of past years are only preludes to the voluntary giving of the future, experts feel.

Dr. John A. Pollard, who conducts the surveys of the Council for Financial Aid to Education, estimates conservatively that higher education will require \$9 billion per year by 1969-70, for educational and general expenditures, endowment, and plant expansion. This would be 1.3 per cent of an expected \$700 billion Gross National Product.

Two billion dollars, Dr. Pollard believes, must come in the form of private gifts and grants. Highlights of his projections:

Business corporations will increase their contributions to higher education at a rate of 16.25 per cent a year. Their 1969-70 total: \$508 million.

Foundations will increase their contributions at a rate of 14.5 per cent a year. Their 1969-70 total: \$520.7 million.

Alumni will increase their contributions at a rate of 14.5 per cent a year. Their 1969-70 total: \$591 million.

Non-alumni individuals will increase their contributions at a rate of 12.6 per cent a year. Their 1969-70 total: \$524.6 million.

Religious denominations will increase their contributions at a rate of 12.7 per cent. Their 1969-70 total: \$215.6 million.

Non-alumni, non-church groups and other sources will increase their contributions at rates of 4 per cent and 1 per cent, respectively. Their 1969-70 total: \$62 million.

"I think we must seriously question whether these estimates are realistic," said a business man, in response to Dr. Pollard's estimate of 1969-70 gifts by corporations. "Corporate funds are not a bottomless pit; the support the corporations give to education is, after all, one of the costs of doing business. . . . It may become more difficult to provide for such support, along with other foreseeable increased costs, in setting product prices. We cannot assume that all this money is going to be available simply because we want it to be. The more fruit you shake from the tree, the more difficult it becomes to find still more."



**Coming: a need
for \$9 billion
a year. Impossible?**

CONTINUED

But others are more optimistic. Says the CFAE:

"Fifteen years ago nobody could safely have predicted the level of voluntary support of higher education in 1962. Its climb has been spectacular. . . .

"So, on the record, it probably *is* safe to say that the potential of voluntary support of U.S. higher education has only been scratched. The people have developed a quenchless thirst for higher learning and, equally, the means and the will to support its institutions adequately."

ALUMNI AND ALUMNAE will have a critical role to play in determining whether the projections turn out to have been sound or unrealistic.

Of basic importance, of course, are their own gifts to their alma maters. The American Alumni Council, in its most recent year's compilation, reported that alumni support, as measured from the reports of 927 colleges and universities, had totaled \$196.7 million—a new record.

Lest this figure cause alumni and alumnae to engage in unrestrained self-congratulations, however, let them consider these words from one of the country's veteran (and most outspoken) alumni secretaries:

"Of shocking concern is the lack of interest of most of the alumni. . . . The country over, only about one-fifth on the average pay dues to their alumni associations; only one-fourth on the average contribute to their alumni funds. There are, of course, heartwarming instances where participation reaches 70 and 80 per cent, but they are rare. . . ."

Commenting on these remarks, a fund-raising consultant wrote:

"The fact that about three-fourths of college and university alumni do not contribute anything at all to their alma maters seems to be a strong indication that they lack sufficient feeling of responsibility to support these institutions. There was a day when it could be argued that this support was not forthcoming because the common man simply did not have funds to contribute to universities. While this argument is undoubtedly used today, it carries a rather hollow ring in a nation owning nearly two cars for every family and so many pleasure boats that there is hardly space left for them on available water."

Alumni support has an importance even beyond the dollars that it yields to higher education. More than 220 business corporations will match their employees' contributions. And alumni support—particularly the percentage of alumni who make gifts—is frequently used by other prospective donors as a guide to how much *they* should give.

Most important, alumni and alumnae wear many hats. They are individual citizens, corporate leaders, voters, taxpayers, legislators, union members, church leaders. In every role, they have an effect on college and university destinies. Hence it is alumni and alumnae, more than any other group, who will determine whether the financial health of U.S. higher education will be good or bad in years to come.

What will the verdict be? No reader can escape the responsibility of rendering it.

The report on this and the preceding 15 pages is the product of a cooperative endeavor in which scores of schools, colleges, and universities are taking part. It was prepared under the direction of the group listed below, who form EDITORIAL PROJECTS FOR EDUCATION, a non-profit organization associated with the American Alumni Council. (The editors, of course, speak for themselves and not for their institutions.) Copyright © 1964 by Editorial Projects for Education, Inc. All rights reserved; no part may be reproduced without express permission of the editors. Printed in U.S.A.

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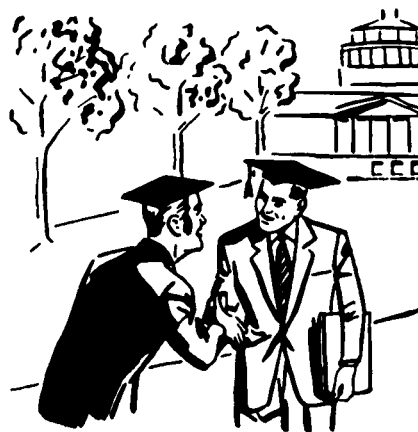
FOUR CONVOCATIONS IN '64

May 27th

June 3rd

May 29th

November 7th



10 Honorary Degrees

Dudley E. Batchelor

Yuichi Kurimoto

Dr. F. C. MacIntosh

Hon. D. Roland Michener

Joseph V. Charyk

Guy Redvers Lyle

Helen G. W. McArthur

Col. George R. Stevens

Margaret I. Jackson

Mrs. Stanley H. McCuaig

ALBERTA ASKS PROVINCES HELP SOLVE UNIVERSITY PROBLEM

An interprovincial examination of Canada's University needs and how they will be paid for was proposed recently by the Alberta government.

The Speech from the Throne, outlining proposed legislation at the first session of the province's 15th Legislature, said governments of the other nine provinces will be invited later this year to attend a conference on present and future University requirements.

Its object will be to develop "a realistic co-ordinated program to meet essential needs within the taxpayer's ability to pay".

Premier E. C. Manning said he hopes the conference will produce a solution to the "serious financial burden" University expansion promises.



NEW HEAD OF ELECTRICAL ENGINEERING

Professor George B. Walker, currently research Professor of Electrical Engineering at the University of British Columbia, has been appointed Professor and Head of the Department of Electrical Engineering effective July 1st. He will succeed Professor J. A. Harle who retires after having been Head of the department since 1947.

Professor Walker was born in Scotland. He received his master's degree in 1940 at the University of Glasgow, and his Ph.D. in 1950 from the University of London. He has had a distinguished teaching career at the Universities of Sheffield, London, and British Columbia and is the author of some 22 publications. He is married and has two children.



RESPECTED TEACHER AND WORTHY PUPIL

A distinguished alumnus, C. S. Miller, '35, who has gained fame for himself in the research field of photo-copying took time recently to visit the campus and his former chemistry professor, Dr. Reubin Sandin. Dr. Miller, left, the originator of Thermo-Fax has his headquarters in St. Paul, Minnesota.

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Education Clinic Hits Reading Problem



THE FACULTY of Education is tackling a problem common to many students, even up to University level—inability to comprehend what they read.

And the cause of the problem, says Miss Dorothy Lampard, associate professor of elementary education, lies not with the teacher but with teaching methods.

Miss Lampard, director of the reading and language centre in the new Education Building, says this is one of the centre's important functions—to find out how to teach comprehension, then to train teachers to teach it. Even some University students, tested at the centre, reveal they cannot comprehend what they read, she said. They get passing marks by using memory.

This situation developed because of too few teachers and too many pupils. Teachers have had to mark

for mechanics, not for ideas. Essays gave way to multiple-choice papers.

The U. of A. reading clinic is one of the few in Canada which tackles problems on the comprehension of conceptual level in addition to working on the perceptual level.

Students who come to the clinic have problems either with the mechanics of reading—they have not developed the skills needed for learning—or they have problems in getting the meaning from what they read.

They are referred by parents, doctors, the provincial guidance clinic, schools, welfare workers. They may be of any age and while each has some special problems, only those who clinicians know are able to learn, are accepted.

But the centre is not a service clinic. It is there to turn out educa-



W.U.S. SCHOLARSHIP WINNER

Paul Paetkau '60 has been awarded one of two World University Service fellowships offered to Canadian University students. The fellowship is available through the courtesy of the Federal Republic of Germany for one year of postgraduate study at a German University.

DEATHS

Dr. R. W. Collins—professor emeritus and former head of the Department of History at the University.

John Boyd '21—well known Calgary lawyer.

Professor William Line '22—professor of physics at the University of Toronto since 1929.

Geoffrey B. Taylor '23, '25—former University Registrar and recipient of the Alumni Golden Jubilee Award in 1959.

Frank L. Lee '24—an Edmonton druggist for the past twenty years.

Dr. Gilbert C. Paterson '24—prominent Lethbridge lawyer and originator of the Lethbridge Junior College.

Dr. James W. Broughton '32—a member of the National Research Council in charge of the fuels and lubricants laboratory.

Alexander E. Burgess '32—prominent Camrose lawyer.

Joseph Morris '32—a resident of Trail, B.C.

Dr. Victor Samuels '43—a medical practitioner at New Westminster, B.C.

Mrs. Richard Procter—the recipient of an honorary Doctor of Laws degree from the University in 1946.

Alex Stockwell '46—an Edmonton teacher for thirty-six years.

Ross P. Bishop '47—former principal of McCauley Junior High School in Edmonton.

Albert J. Hrapko '51—designer of electronic computers for International Business Machines.

Rev. Hugh B. Bertles '56—United Church minister at Airdrie.

Kenneth T. Hansen '57—killed in an air crash.

John E. Appleby '58—well known teacher in the Camrose and Athabasca districts.

Audrey Malin '58—a member of the library staff at the University of British Columbia.

tional specialists. It is the first of its kind in Canada and the only one which has a doctoral program. Courses, offered at the graduate level only, are given in the theory of reading, in clinical work and in administration. Students come from all over Canada.

ENGINEERS OFFER MATRICULATION AWARDS

The Association of Professional Engineers of Alberta has offered six matriculation awards to students in Edmonton, Calgary, and in the general areas of Lethbridge, Medicine Hat, Red Deer, and the Peace River. These awards will provide the students with tuition and fees for their first year at the University. They will be given to the six students with the highest average standing in Mathematics 30 and Mathematics 31, Chemistry 30, and Physics 30. Students must enter Engineering, Geology or Geophysics.

on the CAMPUS

A quiet air has settled over the campus at time of writing as students prepare for final examinations and for many of them spring Convocation which will be staged again this year in two sections, May 29th, and June 3rd.

At Convocation, five honorary Doctor of Law degrees will be conferred. To be honored at the first ceremony will be: **Mrs. Stanley H. McCuaig**, Edmonton, **Yuichi Kurimoto '30**, founder and president of the Nagoya Commercial University in Japan. **Guy Redvers Lyle '27**, director of libraries at Emory University, Atlanta, Ga.

Part two of spring Convocation will honour **Miss Helen McArthur**, national director of nursing services of the Canadian Red Cross Society and **Dr. F. C. McIntosh**, professor of physiology at McGill University.

Fall Convocation on November 7th, will honor **Hon. Roland Michener '20**, former speaker of the Canadian House of Commons, and **Col. George Stevens '15**, graduate and author.

At spring Convocation on the Calgary campus on May 27th, honorary Doctor of Law degrees will be conferred on: **Dudley E. Batchelor**, former chief commissioner for the City of Calgary, **Dr. Joseph V. Charyk '42**, former under secretary of the United States Air Force, and **Miss Margaret I. Jackson '39**, well known Calgary science teacher.

Speaking recently at the official opening of the University's new Armed Services Building, **Dr. Johns**, warned that abolishing nuclear weapons won't solve the world's peace problems.

The President told guests the armed services part of University life is "important and significant" and that it cannot function effectively unless it has reasonable and assured accommodation, like that now provided by the new building across the road from the Faculty of Physical Education on 89th Avenue.

At a recent meeting of the Women's Canadian Club it was stated by **Dr. H. S. Arm-**

strong, vice-president of the University, that high level planning is required for University programs for today.

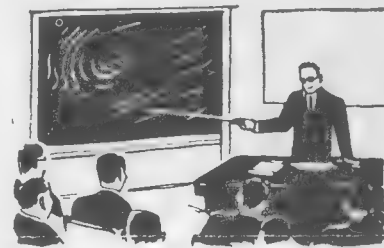
He defined the University as a "community in which the younger and the elder pursue their search for truth" and that leadership, not a reflection of current public opinion, is expected of Universities.

Dr. Ernest Reinhold, director of the Germanic languages and linguistics division of the Department of Modern Languages, is one of thirty Canadian scholars to receive a \$4,000.00 Canada Council fellowship which he will use for research in Germany and Switzerland.

POLITICAL ECONOMY TO SPLIT

The department of Political Economy will be divided into two separate departments as of July 1st. A new department of political science will be headed by **Dr. Grant Davy**. **Dr. Walter D. Gainer** will become head of the new department of economics. The division has been occasioned by the increasing specialization in the areas of political science and economics.

Dr. Eric Hanson, head of the present department of Political Economy, has been appointed Associate Dean of the Faculty of Graduate Studies.



SOD TURNING FOR NEW FACULTY CLUB

At a recent ceremony work was begun on a new Faculty Club Building situated east of the President's residence and south of Saskatchewan Drive. Staff and others in attendance at the sod turning were front row, left to right: **S. G. Davis**, **D. A. Baird**, **J. Rule**, **J. Poole**, **J. G. Parr**, **R. S. Eaton**, **A. T. Elder**, **W. A. D. Burns**, **N. W. Howe**; back row, left to right: **G. R. Davy**, **D. B. Scott**, **M. S. Cooke**, **W. H. Angus**, **A. S. Knowler**, **R. C. W. Hooper**.

ALUMNI

'16

Henry (Sandy) Dyde has been elected to the board of governors of Trent University in Peterborough, Ontario.

The official opening of the Hector MacLeod Building was announced recently on the U.B.C. campus. **Dr. Macleod** joined the University as a lecturer in 1916 and was the first officer commanding the newly formed University of Alberta contingent of the C.O.T.C.

'24

The new president of the Law Society of Alberta is **J. J. Saucier** of Calgary.

'25

A life membership in the Alberta Dairy-men's Association was presented recently to **Dr. C. K. Johns**, recently retired head of the dairy division, Canada Food Research Institute, Ottawa.

'28

Dr. J. C. Jonason has accepted a position as educational consultant with the city of Yorkton, Sask.

'29

Dr. G. F. G. Stanley, dean of arts and head of the history department at the Royal Military College was a guest speaker in Edmonton recently.

'31

The new combined headquarters for Canadian armed forces is being set up this summer and **Air Marshall Frank Miller** will be Canada's first chief of defence staff.

Mrs. Elizabeth Rigby, dietitian in charge at the Lions Gate Hospital at Vancouver, has accepted a new position with the Department of National Health and Welfare in Ottawa as a consultant in dietetics in the nutrition division.

'32

Dr. W. C. Howells, vice-president of Texaco Canada Ltd. has been invited to serve on the board of governors of Notre Dame University in Nelson, B.C.

'32

Edward McCourt, professor of English at the University of Saskatchewan, has completed an historical novel "Fasting Friar" which has all the earmarks of becoming a best seller.

'34

Charles J. Everest has been named assistant principal and head of the department of basic education at the new James Fowler comprehensive high school in Calgary.

'35

The man who invented the infra-red copying process was in Edmonton for Alumni homecoming.

Dr. Carl Miller, now of St. Paul, Minn., developed the Thermo-Fax Brand copying machine, well-known today in business and educational fields. Dr. Miller is now technical director of the Minnesota Mining and Manufacturing Company in St. Paul.

'36

In the January issue of the Western Miner special recognition was accorded **B. E. Hurdle**, designated the mining man of the month.

T. R. O'Donnel has been appointed secretary of the Saskatchewan Law Society.

'38

Dr. Frank T. McClure, a prime example of Canada's own brain drain, has received a high Pentagon citation for "inspired leadership" in heading a massive four-year effort to solve the costly problem of rocket shakes. Over the year McClure has won wide recognition in the field of rocket propulsion. President Truman cited him for merit in 1946.

'39

Dr. W. Francis Hall has been appointed chief medical officer of the Workmen's Compensation Board.

'40

A gold medalist from the University, **F. Eugene LaBrie** has joined a Hamilton, Ontario, legal firm.

'42

Rev. Hart Cantelon, principal of Alberta College has resigned to accept a call as minister of Southminster United Church in Lethbridge.

'43

James E. Bromley has been promoted to the position of associate director of development of the Monsanto Company in New York.

Dr. Donald G. McAlpine has been appointed assistant executive director (medical) of the Royal Alexandra Hospital, Edmonton.

'44

Gin poles, mud guns, surge chambers, crown blocks, and swivel balls—they may sound as strange as the make-believe world of a Lewis Carroll but they really make sense to Tariff Board economist **J. E. (Jim) Gander**.

Mr. Gander—who is director of research for the tariff board—has the complex job, assisted by a staff of eight, of finding practical principles on which to base recommended changes in the maze of tariff rates.

'48

Ross M. Jefferies has been named president of the National Concrete Products Association.

L. A. Miller has been appointed head office manager (agricultural chemicals) for Shell Canada Limited.

'49

James S. Denis has been named mechanical supervisor and technical service supervisor at the Sarnia refinery of Sun Oil Company Ltd.

W. G. Jewitt Jr., Kimberley, has been appointed superintendent of the C.M. and S. plant under construction in Regina.

Senior engineer for missile test projects at Cape Kennedy is **Dr. Paul N. Somerville**, who has a string of degrees as long as the jetpath behind most of the launchings. Dr. Somerville was recently appointed chairman of the mathematics graduation department, Brevard Engineering College, Florida.

'50

A. E. Faunt has been appointed superintendent at the C.M.&S. Co. at Kimberley.

Student drama at the University of Alberta has been recognized as among the best in North America.

The work of the university's drama division in training students in the theatre arts and in producing new plays was recognized recently at Washington, D.C. At a White House ceremony dedicated to

people who encourage production of new theatrical works, **Prof. Gordon Peacock**, head of the U. of A.'s drama division, was cited for his contribution to the development of theatre in universities.

Dr. Dalton C. MacWilliams has been advanced to the rank of senior research chemist by the Dow Chemical Company. The rating was established by the company several years ago to recognize outstanding contributions in research.

'51

Donald F. Baker has been appointed manager of engineering and production for Numac Oil and Gas Ltd., Calgary.

A. R. Jones has been appointed supervisor of the Farm Management Extension section of the department of agriculture's farm economics branch.

Richard G. Wheatly has been appointed relief magistrate in Edmonton.

'52

Neil J. Stewart has been appointed division manager, Pan American Petroleum Corporation.

'54

Dr. William B. Carpenter has been awarded a master of science degree in pathology from the University of Minnesota.

John H. MacKenzie is Red Deer's first full-time Crown prosecutor.

W. W. Winspear has been named president of the board of directors of Timber Preservers Ltd. with headquarters in Vancouver.

Dr. Clifford H. McCormick has been appointed director of dental services for the Manitoba department of health.

'56

John G. Calpas is working towards a master degree in agricultural education at the University of California.

Norman A. Clark has been promoted district production superintendent with the Skelly Oil Co.

Charles R. B. Dunlop will join the law faculty at U.B.C. this fall.

Ronald A. Schaufele has been appointed assistant professor of the department of statistics at Columbia University, New York.

'57

P. B. Nelson has been promoted to the rank of Flight Lieutenant at RCAF station Goose Bay where he is employed as station recreation officer.

'58

Bruce McDonald has accepted a position at MacDonald College in Montreal, where he will be professor in charge of swine and small animal nutrition.



SILVER GRADS IN NURSING 1939

This year's Homecoming Banquet and Ball attracted many members of the silver anniversary graduating class. The School of Nursing was particularly well represented. Seen observing their 25th milestone were left to right: Mrs. S. Legg (nee Bernice Barrett), Mrs. H. E. Duggan (nee Sadie Jones), Mrs. D. Patry (nee Irene Carson), Mrs. J. E. Derry (nee Gwen White), Mrs. A. S. Hamilton (nee Blodwen Cogland).

Bill Owen is farm commentator with the CBC in Edmonton.

J. R. Stephen has been appointed research engineer with C.M.&S.

'59

M. E. Gray has been selected as location manager with Schlumberger Ltd.

Donald A. Repka was recently admitted to the Alberta Bar.

'60

John P. Borger is assistant professor of science at Concordia College.

Donald Boyer has been elected president of the Edmonton Young Liberal Association.

It takes courage for a young girl to leave friends to go to a far country and dedicate herself to the work she feels she should do.

Yet that is precisely the course **Sandra Falck** is taking. At her own request, she is being sent as a medical missionary to Ludhaiana, in the Punjab country of Northern India, by the Anglican Church of Canada Missionary Society.

Dr. D. G. Fish has been appointed research associate of the Association of Canadian Medical Colleges in Ottawa.

Flight Lieutenant S. S. Kereliuk of RCAF station Southport is one of two pilots chosen to fly the new Canadian built supersonic CF-104 Starfighter.

Garry M. Lindberg has been awarded a doctorate in engineering from Cambridge University. Dr. Lindberg now works as a researcher for the National Aeronautical Establishment of Canada.

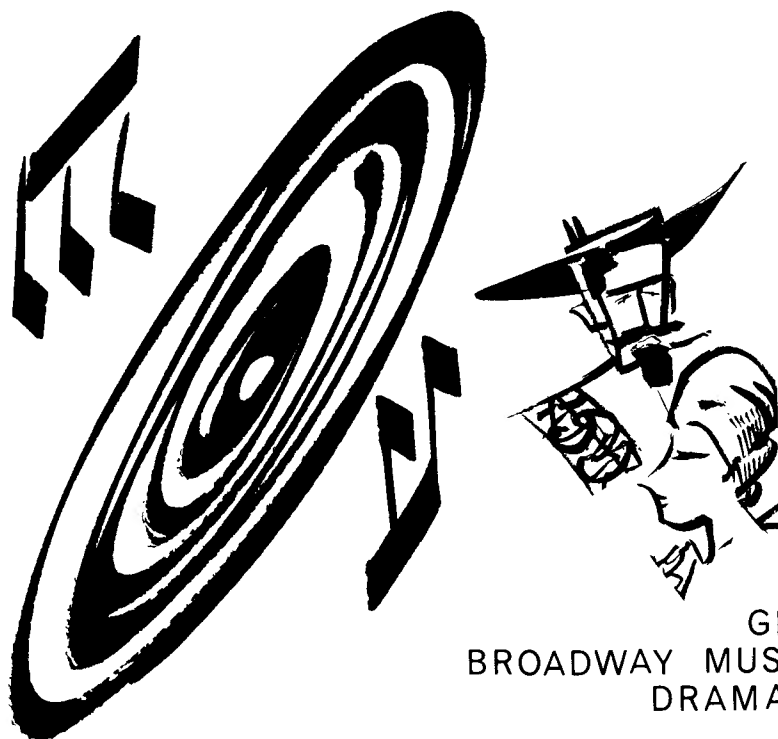
Dr. Gordon Williams has joined the staff of the University of Queensland in Australia as senior lecturer in petroleum engineering.

'61

Ellis Treffry has been promoted to associate district agriculturist at Taber.

'62

Gordon C. Everest has an assistantship at MIT which covers study on a project known as MAC (Multiple Access Computers). This project is sponsored by the U.S. Defence Department. Part of his endeavor is to attempt to write language compilers for such a system.



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